

Patent Serial No. 09/807,067

IN THE CLAIMS

Please amend claims 6 and 8 as follows:

1. (Previously Amended) A method of manufacturing an integrated circuit, which method includes a stage wherein lateral isolation regions (spacers) are formed at the sides of a projecting polysilicon region so as to be in contact therewith, said lateral isolation regions each being composed of a smaller isolation layer (402) that is formed by depositing an oxide layer over and around the polysilicon region in a single step, which is in contact with said projecting region (2), and of a larger isolation layer, which method also includes a silicidation process to which the upper part of the polysilicon region is subjected, which silicidation process includes the deposition on said upper part of a metal layer which is capable of forming a metal silicide (5) with the silicon, characterized in that the silicidation process includes, prior to the deposition of said metal layer, an etch step to which at least the vertical portion of the smaller isolation layer (402) is subjected so as to form a trench (TR) between the larger isolation layer (411) of each lateral isolation region and the corresponding side (F) of the polysilicon region (2), wherein a depth of the trench, measured from a top of the larger isolation layer down to

Patent Serial No. 09/807,067

the smaller isolation layer, is maximally half the height of the larger isolation area, and in that the deposition of the metal layer is a directional deposition.

2. (Original) A method as claimed in claim 1, characterized in that the depth (h) of the trench is at least equal to  $1/20^{\text{th}}$  of the height (H) of the projecting region.

3. (Previously amended) A method as in claim 1, characterized in that the depth (h) of the trench is equal to maximally half the thickness (E) of the larger isolation layer.

4. (Original) A method as claimed in any one of the preceding claims, characterized in that the vertical portion of the smaller isolation layer (402) is anisotropically etched.

5. (Original) A method as claimed in any one of the claims 1 to 3, characterized in that the vertical portion of the smaller isolation layer (402) is isotropically etched.

6. (Currently Amended) An integrated circuit comprising lateral isolation regions formed at the sides of a least one

Patent Serial No. 09/807,067

projecting region of polysilicon so as to be in contact therewith, each lateral isolation region being composed of a smaller isolation layer (402), contacting said projecting region (2), and a larger isolation layer (411), and comprising a zone (5) including a metal silicide situated in the upper part of the polysilicon region (2), characterized in that each lateral isolation region comprises a vertical trench (TR) made in the smaller isolation layer (402) between the larger isolation layer (411) and the corresponding side (F) of the projecting region (2), said trench (TR) extending from the top of the larger isolation layer (411) of the corresponding lateral isolation region down to a depth (h), which is equal to maximally half the height (H1) of the larger isolation layer, and wherein the metal silicide includes a substantially planar surface that is higher than the larger isolation layer.

7. (Original) An integrated circuit as claimed in claim 6, characterized in that the depth (h) of the trench (TR) is at least equal to  $1/20^{\text{th}}$  of the height (H2) of the projecting region of silicidized polysilicon.

8. (Currently Amended) An integrated circuit as claimed in claim 6 or 7, characterized in that the depth (h) of the trench (TR) is ~~equal to maximally half the height (H1) of the larger~~

Patent Serial No. 09/807,067

~~isolation layer and~~ equal to maximally half the thickness (E) of  
the larger isolation layer.

9. (Previously Amended) An integrated circuit as claimed in claim 6, characterized in that each lateral isolation region comprises a horizontal trench (TH) made in the smaller isolation layer (402) between a larger isolation layer (411) and the substrate (1) of the integrated circuit.